





## OFFICE OF NUCLEAR

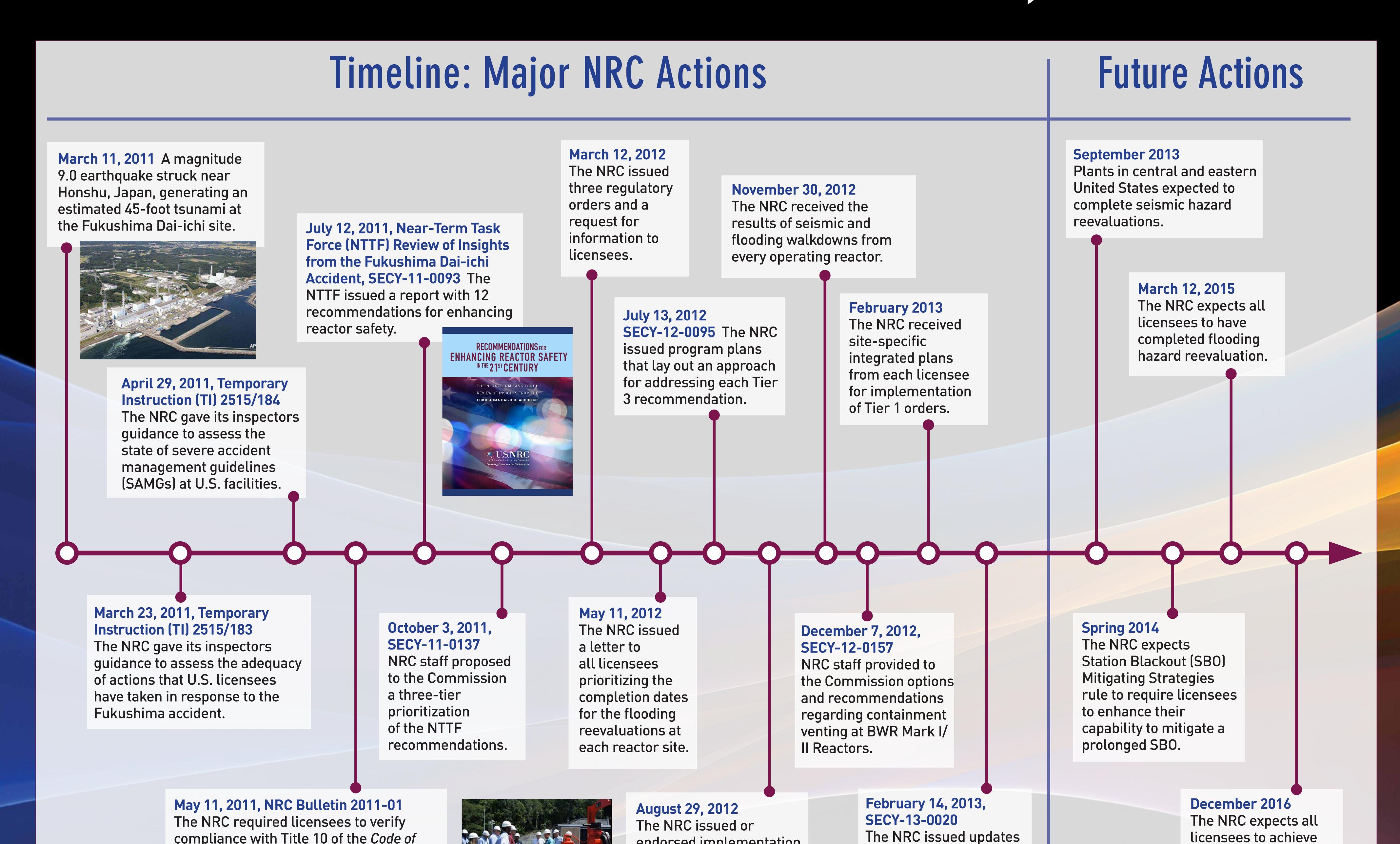
compliance with Title 10 of the Code of

mitigating strategies programs.

Federal Regulations (10 CFR) 50.54(hh)(2)

and respond with information about their

# Learning from Fukushima: The NRC's Past, Present, and Future Actions



endorsed implementation

guidance for each of the

three Tier 1 orders.

on the status and plans

for ongoing Fukushima-

related activities.

### **Three-Tiered Prioritization of Actions**

### Tier 1

#### Orders Issued March 12, 2012

- Develop strategies to mitigate beyonddesign-basis natural phenomena that address multiunit events and reasonable protection of equipment.
- Install reliable hardened vents in boiling-water reactors with Mark I and II containments
- Install enhanced spent fuel pool level instrumentation

#### Request for Information under 10 CFR 50.54(f) Issued March 12, 2012

- Reevaluate seismic and flooding hazards
- Perform walkdowns of seismic and flooding hazards
- Assess staffing and communications equipment needs to respond to multiunit events and prolonged station blackout (SBO)

#### Rulemaking Initiatives

- Modify the SBO rule to enhance SBO mitigation capability
- Strengthen and integrate onsite emergency response procedures, training, and exercises

#### Tier 2

- Enhance spent fuel pool makeup capability.
- Take additional emergency preparedness (EP) regulatory actions.
- Reevaluate Other Natural Hazards

#### Tier 3

licensees to achieve

full implementation

of the Tier 1 orders.

- Periodically confirm seismic and flooding hazard assumptions.
- Evaluate potential enhancements for preventing or mitigating seismically induced fires and floods.

- Evaluate the need for reliable hardened vents in other containment designs.
- Assess the need for hydrogen control and mitigation inside containment and other buildings.
- Make additional EP enhancements to address prolonged SBO and multiunit
- Evaluate the need to enhance Emergency Response Data System capability.
- Modify the Reactor Oversight Process to reflect revised defense-in-depth framework.
- Enhance NRC staff training on severe accidents and SAMGs.
- Confirm basis of emergency planning zone size.
- Evaluate the need for prestaging of potassium iodide beyond 10 miles
- Evaluate merits of transferring spent fuel to dry cask storage.

- Recommendation 1
- Other (non-power reactor) regulated facilities

### NRC Oversight of Licensee **Implementation**

- Review licensee submittals
- Document results of review
- Take further regulatory action if warranted
- Conduct inspections to verify compliance with requirements and commitments

